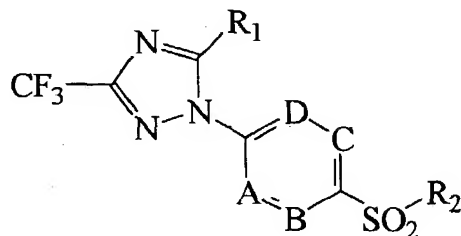


What is claimed is:

1. A 1,2,4-triazole derivative represented by formula 1:

Formula 1



5 wherein:

R₁ is a C₃-C₆ cycloalkyl group; a C₃-C₆ cycloalkenyl group; a phenyl group; a phenyl group substituted with one or more selected from the group consisting of a C₁-C₆ alkyl group, a C₁-C₆ haloalkyl group, a C₁-C₆ alkoxy group, a C₁-C₆ haloalkoxy group, a halogen group, an amino group, a monoalkylamino group, a dialkylamino group, a nitro group, and a cyano group; a styrenyl group; a C₁-C₆ alkoxy styrenyl group; or a pyridyl group;

R₂ is a methyl or amino group; and

A, B, C, and D are independently carbon or nitrogen;

15 or a non-toxic salt thereof.

2. The 1,2,4-triazole derivative according to claim 1, which is selected from the group consisting of:

1-(4-methanesulfonylphenyl)-5-phenyl-3-trifluoromethyl-1H-[1,2,4]triazole;

20 5-(4-bromophenyl)-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

5-(3-bromophenyl)-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

25 5-(4-fluorophenyl)-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

5-(3,5-dichloro-4-methoxyphenyl)-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

30 5-(4-chlorophenyl)-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

5-(3,4-dichlorophenyl)-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

5-(3,4-dimethoxyphenyl)-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

5-(3,4-difluorophenyl)-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

5 1-(4-methanesulfonylphenyl)-5-(4-methoxyphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

5-(3,4-dimethoxyphenyl)-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

1-(4-methanesulfonylphenyl)-5-p-tolyl-3-trifluoromethyl-1H-[1,2,4]triazole;

10 iazole;

5-(3,4-dimethylphenyl)-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

5-(3-chloro-4-methylphenyl)-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

15 5-(4-chloro-3-methylphenyl)-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

5-(3-chloro-4-methoxyphenyl)-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

5-(4-chloro-3-methoxyphenyl)-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

20 5-(3-fluoro-4-methylphenyl)-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

5-(4-fluoro-3-methylphenyl)-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

25 5-(3-fluoro-4-methoxyphenyl)-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

1-(4-methanesulfonylphenyl)-3-trifluoromethyl-5-(4-trifluoromethylphenyl)-1H-[1,2,4]triazole;

5-(4-ethoxyphenyl)-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

30 1H-[1,2,4]triazole;

1-(4-methanesulfonylphenyl)-5-(4-trifluoromethoxyphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

5-(4-t-butylphenyl)-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

35 5-(4-cyanophenyl)-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

5-[4-(N-methylamino)phenyl]-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

5-[4-(N,N-dimethylamino)phenyl]-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

5-(4-aminophenyl)-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

5 5-(3-trifluoromethylphenyl)-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

5-(3-methoxyphenyl)-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

10 1-(4-methanesulfonylphenyl)-5-m-tolyl-3-trifluoromethyl-1H-[1,2,4]triazole;

1-(4-methanesulfonylphenyl)-5-o-tolyl-3-trifluoromethyl-1H-[1,2,4]triazole;

5-(2-bromophenyl)-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

15 5-(2-methoxyphenyl)-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

5-(2,4-difluorophenyl)-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

20 5-(2,5-difluorophenyl)-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

5-(2,4,5-trifluorophenyl)-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

5-(2,3-dichlorophenyl)-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

25 5-(2,4-dichlorophenyl)-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

5-(3,5-difluorophenyl)-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

30 5-(3,5-dimethoxyphenyl)-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

5-(2,4-dimethoxyphenyl)-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

5-(3,4,5-trimethoxyphenyl)-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

35 5-(2-fluoro-4-trifluoromethylphenyl)-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

5-(2-chloro-4-nitrophenyl)-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

5-(2,4-dichloro-5-fluorophenyl)-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

5-(3-fluoro-4-methylphenyl)-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

5 5-benzo[1,3]dioxol-5-yl-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

5-methanesulfonyl-2-[3-trifluoromethyl-5-(4-trifluoromethylphenyl)-[1,2,4]triazol-1-yl]pyridine;

5-methanesulfonyl-2-[3-trifluoromethyl-5-(4-ethoxyphenyl)-[1,2,4]triazol-1-yl]pyridine;

10 5-methanesulfonyl-2-[3-trifluoromethyl-5-(4-trifluoromethoxyphenyl)-[1,2,4]triazol-1-yl]pyridine;

5-methanesulfonyl-2-[3-trifluoromethyl-5-(4-t-butylphenyl)-[1,2,4]triazol-1-yl]pyridine;

15 5-methanesulfonyl-2-[3-trifluoromethyl-5-(4-cyanophenyl)-[1,2,4]triazol-1-yl]pyridine;

5-methanesulfonyl-2-[3-trifluoromethyl-5-(4-aminophenyl)-[1,2,4]triazol-1-yl]pyridine;

5-methanesulfonyl-2-[3-trifluoromethyl-5-(4-N-methylaminophenyl)-[1,2,4]triazol-1-yl]pyridine;

20 5-methanesulfonyl-2-[3-trifluoromethyl-5-(4-N,N-dimethylaminophenyl)-[1,2,4]triazol-1-yl]pyridine;

5-methanesulfonyl-2-[3-trifluoromethyl-5-(3-methylphenyl)-[1,2,4]triazol-1-yl]pyridine;

25 5-methanesulfonyl-2-[3-trifluoromethyl-5-(3-trifluoromethylphenyl)-[1,2,4]triazol-1-yl]pyridine;

5-methanesulfonyl-2-[3-trifluoromethyl-5-(3-methoxyphenyl)-[1,2,4]triazol-1-yl]pyridine;

5-methanesulfonyl-2-[3-trifluoromethyl-5-(2,4-difluorophenyl)-[1,2,4]triazol-1-yl]pyridine;

30 5-methanesulfonyl-2-[3-trifluoromethyl-5-(2,5-difluorophenyl)-[1,2,4]triazol-1-yl]pyridine;

5-methanesulfonyl-2-[3-trifluoromethyl-5-(2,4,5-trifluorophenyl)-[1,2,4]triazol-1-yl]pyridine;

35 5-methanesulfonyl-2-[3-trifluoromethyl-5-(2,3-dichlorophenyl)-[1,2,4]triazol-1-yl]pyridine;

5-methanesulfonyl-2-[3-trifluoromethyl-5-(2,4-dichlorophenyl)-[1,2,4]triazol-1-yl]pyridine;

5-methanesulfonyl-2-[3-trifluoromethyl-5-(3,5-difluorophenyl)-[1,2,4]triazol-1-yl]pyridine;

5-methanesulfonyl-2-[3-trifluoromethyl-5-(3,5-dimethoxyphenyl)-[1,2,4]triazol-1-yl]pyridine;

5-methanesulfonyl-2-[3-trifluoromethyl-5-(2,4-dimethoxyphenyl)-[1,2,4]triazol-1-yl]pyridine;

5-methanesulfonyl-2-[3-trifluoromethyl-5-(3,4,5-trifluorophenyl)-[1,2,4]triazol-1-yl]pyridine;

5-methanesulfonyl-2-[3-trifluoromethyl-5-(2-fluoro-4-trifluoromethylphenyl)-[1,2,4]triazol-1-yl]pyridine;

5-methanesulfonyl-2-[3-trifluoromethyl-5-(2-chloro-4-nitrophenyl)-[1,2,4]triazol-1-yl]pyridine;

5-methanesulfonyl-2-[3-trifluoromethyl-5-(2,4-dichloro-5-fluorophenyl)-[1,2,4]triazol-1-yl]pyridine;

5-methanesulfonyl-2-[3-trifluoromethyl-5-(3-fluoro-4-methylphenyl)-[1,2,4]triazol-1-yl]pyridine;

2-(5-benzo[1,3]dioxol-5-yl-3-trifluoromethyl-[1,2,4]triazol-1-yl)-5-methanesulfonyl pyridine;

3-[2-(4-methanesulfonylphenyl)-5-trifluoromethyl-2H-[1,2,4]triazol-3-yl]pyridine;

4-[2-(4-methanesulfonylphenyl)-5-trifluoromethyl-2H-[1,2,4]triazol-3-yl]pyridine;

5-cyclohexyl-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

5-cyclohexen-1-yl-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

4-(5-phenyl-3-trifluoromethyl-[1,2,4]triazol-1-yl)benzenesulfonamide;

4-[5-(4-bromophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]benzenesulfonamide;

4-[5-(4-fluorophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]benzenesulfonamide;

4-[5-(3,4-difluorophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]benzenesulfonamide;

4-[5-(4-chlorophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]benzenesulfonamide;

4-[5-(3,4-dichlorophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]benzenesulfonamide;

4-[5-(4-methoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]benzenesulfonamide;

4-[5-(3,4-dimethoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]benzenesulfonamide;

5 4-(5-p-tolyl-3-trifluoromethyl-[1,2,4]triazol-1-yl)benzenesulfonamide;

4-[5-(3,4-dimethylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]benzenesulfonamide;

4-[5-(3-chloro-4-methylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]benzenesulfonamide;

10 4-[5-(4-chloro-3-methylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]benzenesulfonamide;

4-[5-(3-chloro-4-methoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]benzenesulfonamide;

15 4-[5-(4-chloro-3-methoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]benzenesulfonamide;

4-[5-(3-fluoro-4-methylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]benzenesulfonamide;

4-[5-(4-fluoro-3-methylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]benzenesulfonamide;

20 4-[5-(3-fluoro-4-methoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]benzenesulfonamide;

4-[5-(3,5-dichloro-4-methoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]benzenesulfonamide;

25 4-[3-trifluoromethyl-5-(4-trifluoromethylphenyl)-[1,2,4]triazol-1-yl]benzenesulfonamide;

4-[3-trifluoromethyl-5-(4-ethoxyphenyl)-[1,2,4]triazol-1-yl]benzenesulfonamide;

4-[3-trifluoromethyl-5-(4-trifluoromethoxyphenyl)-[1,2,4]triazol-1-yl]benzenesulfonamide;

30 4-[3-trifluoromethyl-5-(4-t-butylphenyl)-[1,2,4]triazol-1-yl]benzenesulfonamide;

4-[3-trifluoromethyl-5-(4-cyanophenyl)-[1,2,4]triazol-1-yl]benzenesulfonamide;

35 4-[3-trifluoromethyl-5-(4-aminophenyl)-[1,2,4]triazol-1-yl]benzenesulfonamide;

4-[3-trifluoromethyl-5-(4-N-methylaminophenyl)-[1,2,4]triazol-1-yl]benzenesulfonamide;

4-[3-trifluoromethyl-5-(4-N,N-dimethylaminophenyl)-[1,2,4]triazol-1-yl]benzenesulfonamide;

4-[3-trifluoromethyl-5-m-tolyl-[1,2,4]triazol-1-yl]benzenesulfonamide;

5 4-[3-trifluoromethyl-5-(3-trifluoromethylphenyl)-[1,2,4]triazol-1-yl]benzenesulfonamide;

4-[3-trifluoromethyl-5-(3-methoxyphenyl)-[1,2,4]triazol-1-yl]benzenesulfonamide;

4-[3-trifluoromethyl-5-(2-bromophenyl)-[1,2,4]triazol-1-yl]benzenesulfonamide;

10 4-[3-trifluoromethyl-5-(2-methoxyphenyl)-[1,2,4]triazol-1-yl]benzenesulfonamide;

4-[3-trifluoromethyl-5-(2,4-difluorophenyl)-[1,2,4]triazol-1-yl]benzenesulfonamide;

15 4-[3-trifluoromethyl-5-(2,5-difluorophenyl)-[1,2,4]triazol-1-yl]benzenesulfonamide;

4-[3-trifluoromethyl-5-(2,4,5-trifluorophenyl)-[1,2,4]triazol-1-yl]benzenesulfonamide;

4-[3-trifluoromethyl-5-(2,3-dichlorophenyl)-[1,2,4]triazol-1-yl]benzenesulfonamide;

20 4-[3-trifluoromethyl-5-(2,4-dichlorophenyl)-[1,2,4]triazol-1-yl]benzenesulfonamide;

4-[3-trifluoromethyl-5-(3,5-dimethoxyphenyl)-[1,2,4]triazol-1-yl]benzenesulfonamide;

25 4-[3-trifluoromethyl-5-(2,4-dimethoxyphenyl)-[1,2,4]triazol-1-yl]benzenesulfonamide;

4-[3-trifluoromethyl-5-(3,4,5-trifluorophenyl)-[1,2,4]triazol-1-yl]benzenesulfonamide;

4-[3-trifluoromethyl-5-(2-fluoro-4-trifluoromethylphenyl)-[1,2,4]triazol-1-yl]benzenesulfonamide;

30 4-[3-trifluoromethyl-5-(2-chloro-4-nitrophenyl)-[1,2,4]triazol-1-yl]benzenesulfonamide;

4-[3-trifluoromethyl-5-(2,4-dichloro-5-fluorophenyl)-[1,2,4]triazol-1-yl]benzenesulfonamide;

35 4-[3-trifluoromethyl-5-(3-fluoro-4-methylphenyl)-[1,2,4]triazol-1-yl]benzenesulfonamide;

4-(5-benzo[1,3]dioxol-5-yl-3-trifluoromethyl-[1,2,4]triazol-1-yl)benzenesulfonamide;

4-(5-pyridin-3-yl-3-trifluoromethyl-[1,2,4]triazol-1-yl)benzenesulfon
amide;

4-(5-pyridin-4-yl-3-trifluoromethyl-[1,2,4]triazol-1-yl)benzenesulfon
amide;

5 4-(5-cyclohexyl-3-trifluoromethyl-[1,2,4]triazol-1-yl)benzenesulfona
mide;

4-(5-cyclohexen-1-yl-3-trifluoromethyl-[1,2,4]triazol-1-yl)benzenes
ulfonamide;

5-methanesulfonyl-2-(5-phenyl-3-trifluoromethyl-[1,2,4]triazol-1-yl)
10 pyridine;

2-[5-(4-bromophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-5-metha
nesulfonyl pyridine;

2-[5-(4-fluorophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-5-methan
esulfonyl pyridine;

15 2-[5-(3,4-difluorophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-5-met
hanesulfonyl pyridine;

2-[5-(4-chlorophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-5-methan
esulfonyl pyridine;

2-[5-(3,4-dichlorophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-5-met
20 hanesulfonyl pyridine;

5-methanesulfonyl-2-[5-(4-methoxyphenyl)-3-trifluoromethyl-[1,2,4
]triazol-1-yl]pyridine;

2-[5-(3,4-dimethoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-5-
methanesulfonyl pyridine;

25 5-methanesulfonyl-2-(5-p-tolyl-3-trifluoromethyl-[1,2,4]triazol-1-yl)p
yridine;

2-[5-(3,4-dimethylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-5-me
thanesulfonyl pyridine;

2-[5-(3-chloro-4-methylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-
30 5-methanesulfonyl pyridine;

2-[5-(4-chloro-3-methylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-
5-methanesulfonyl pyridine;

6-[5-(3-chloro-4-methoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-y
l]pyridine-3-sulfonic acid amide;

35 6-[5-(4-chloro-3-methoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-y
l]pyridine-3-sulfonic acid amide;

6-[5-(3-fluoro-4-methylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]p
yridine-3-sulfonic acid amide;

6-[3-trifluoromethyl-5-(4-trifluoromethylphenyl)-[1,2,4]triazol-1-yl]pyridine-3-sulfonic acid amide;

6-[3-trifluoromethyl-5-(4-ethoxyphenyl)-[1,2,4]triazol-1-yl]pyridine-3-sulfonic acid amide;

5 6-[3-trifluoromethyl-5-(4-trifluoromethoxyphenyl)-[1,2,4]triazol-1-yl]pyridine-3-sulfonic acid amide;

6-[3-trifluoromethyl-5-(4-*t*-butylphenyl)-[1,2,4]triazol-1-yl]pyridine-3-sulfonic acid amide;

6-[3-trifluoromethyl-5-(4-cynophenyl)-[1,2,4]triazol-1-yl]pyridine-3-sulfonic acid amide;

10 6-[3-trifluoromethyl-5-(4-aminophenyl)-[1,2,4]triazol-1-yl]pyridine-3-sulfonic acid amide;

6-[3-trifluoromethyl-5-(4-*N*-methylaminophenyl)-[1,2,4]triazol-1-yl]pyridine-3-sulfonic acid amide;

15 6-[3-trifluoromethyl-5-(4-*N,N*-dimethylaminophenyl)-[1,2,4]triazol-1-yl]pyridine-3-sulfonic acid amide;

6-[3-trifluoromethyl-5-*m*-tolyl-[1,2,4]triazol-1-yl]pyridine-3-sulfonic acid amide;

6-[3-trifluoromethyl-5-(3-methoxyphenyl)-[1,2,4]triazol-1-yl]pyridine-3-sulfonic acid amide;

20 6-[3-trifluoromethyl-5-(3-trifluoromethylphenyl)-[1,2,4]triazol-1-yl]pyridine-3-sulfonic acid amide;

6-[3-trifluoromethyl-5-(2-bromophenyl)-[1,2,4]triazol-1-yl]pyridine-3-sulfonic acid amide;

25 6-[3-trifluoromethyl-5-(2-methoxyphenyl)-[1,2,4]triazol-1-yl]pyridine-3-sulfonic acid amide;

6-[3-trifluoromethyl-5-(2,4-difluorophenyl)-[1,2,4]triazol-1-yl]pyridine-3-sulfonic acid amide;

6-[3-trifluoromethyl-5-(2,5-difluorophenyl)-[1,2,4]triazol-1-yl]pyridine-3-sulfonic acid amide;

30 6-[3-trifluoromethyl-5-(3,5-difluorophenyl)-[1,2,4]triazol-1-yl]pyridine-3-sulfonic acid amide;

6-[3-trifluoromethyl-5-(2,4,5-trifluorophenyl)-[1,2,4]triazol-1-yl]pyridine-3-sulfonic acid amide;

35 6-[3-trifluoromethyl-5-(2-fluoro-4-trifluoromethylphenyl)-[1,2,4]triazol-1-yl]pyridine-3-sulfonic acid amide;

6-[3-trifluoromethyl-5-(2,4-dimethoxyphenyl)-[1,2,4]triazol-1-yl]pyridine-3-sulfonic acid amide;

6-[3-trifluoromethyl-5-(3,4,5-trimethoxyphenyl)-[1,2,4]triazol-1-yl]pyridine-3-sulfonic acid amide;

6-[3-trifluoromethyl-5-(2-chloro-4-nitrophenyl)-[1,2,4]triazol-1-yl]pyridine-3-sulfonic acid amide;

5 6-[3-trifluoromethyl-5-(2,4-difluoro-5-fluorophenyl)-[1,2,4]triazol-1-yl]pyridine-3-sulfonic acid amide;

6-[3-trifluoromethyl-5-(3-fluoro-4-methylphenyl)-[1,2,4]triazol-1-yl]pyridine-3-sulfonic acid amide;

2-[5-(4-fluoro-3-methylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-5-methanesulfonyl pyridine;

10 2-[5-(3-fluoro-4-methoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-5-methanesulfonyl pyridine;

2-[5-(3,5-dichloro-4-methoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-5-methanesulfonyl pyridine;

15 5-methanesulfonyl-2-((3-pyridinyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl))pyridine;

5-methanesulfonyl-2-((4-pyridinyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl))pyridine;

2-(5-cyclohexyl-3-trifluoromethyl-[1,2,4]triazol-1-yl)-5-methanesulfonyl pyridine;

20 2-(5-cyclohexen-1-yl-3-trifluoromethyl-[1,2,4]triazol-1-yl)-5-methanesulfonyl pyridine;

6-(5-phenyl-3-trifluoromethyl-[1,2,4]triazol-1-yl)pyridine-3-sulfonic acid amide;

25 6-[5-(4-bromophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-pyridine-3-sulfonic acid amide;

6-[5-(4-fluorophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridine-3-sulfonic acid amide;

6-[5-(3,4-difluorophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridine-3-sulfonic acid amide;

30 6-[5-(4-chlorophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridine-3-sulfonic acid amide;

6-[5-(3,4-dichlorophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridine-3-sulfonic acid amide;

35 6-[5-(4-methoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridine-3-sulfonic acid amide;

6-[5-(3,4-dimethoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridine-3-sulfonic acid amide;

6-(5-p-tolyl-3-trifluoromethyl-[1,2,4]triazol-1-yl)pyridine-3-sulfonic acid amide;

6-[5-(3,4-dimethylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridine-3-sulfonic acid amide;

5 6-[5-(3-chloro-4-methylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridine-3-sulfonic acid amide;

6-[5-(4-chloro-3-methylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridine-3-sulfonic acid amide;

6-[5-(3-chloro-4-methoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridine-3-sulfonic acid amide;

10 6-[5-(4-chloro-3-methoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridine-3-sulfonic acid amide;

6-[5-(3-fluoro-4-methylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridine-3-sulfonic acid amide;

15 6-[5-(4-fluoro-3-methylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridine-3-sulfonic acid amide;

6-[5-(3-fluoro-4-methoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridine-3-sulfonic acid amide;

6-[5-(3,5-dichloro-4-methoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridine-3-sulfonic acid amide;

20 6-(5-pyridin-3-yl-3-trifluoromethyl-[1,2,4]triazol-1-yl)pyridine-3-sulfonic acid amide;

6-(5-pyridin-4-yl-3-trifluoromethyl-[1,2,4]triazol-1-yl)pyridine-3-sulfonic acid amide;

25 6-(5-cyclohexyl-3-trifluoromethyl-[1,2,4]triazol-1-yl)pyridine-3-sulfonic acid amide;

6-(5-cyclohexen-1-yl-3-trifluoromethyl-[1,2,4]triazol-1-yl)pyridine-3-sulfonic acid amide;

2-methanesulfonyl-5-(5-phenyl-3-trifluoromethyl-[1,2,4]triazol-1-yl)pyridine;

30 5-[5-(4-bromophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-2-methanesulfonyl pyridine;

5-[5-(4-fluorophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-2-methanesulfonyl pyridine;

35 5-[5-(3,4-difluorophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-2-methanesulfonyl pyridine;

5-[5-(4-chlorophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-2-methanesulfonyl pyridine;

5-[5-(3,4-dichlorophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-2-methanesulfonyl pyridine;

2-methanesulfonyl-5-[5-(4-methoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridine;

5 5-[5-(3,4-dimethoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-2-methanesulfonyl pyridine;

2-methanesulfonyl-5-(5-p-tolyl-3-trifluoromethyl-[1,2,4]triazol-1-yl)pyridine;

5-[5-(3,4-dimethylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-2-methanesulfonyl pyridine;

10 5-[5-(3-chloro-4-methylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-2-methanesulfonyl pyridine;

5-[5-(4-chloro-3-methylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-2-methanesulfonyl pyridine;

15 5-[5-(3-chloro-4-methoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-2-pyridine-2-sulfonic acid amide;

5-[5-(4-chloro-3-methoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridine-2-sulfonic acid amide;

5-[5-(3-fluoro-4-methylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridine-2-sulfonic acid amide;

20 5-[5-(4-fluoro-3-methylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-2-methanesulfonyl pyridine;

5-[5-(3-fluoro-4-methoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-2-methanesulfonyl pyridine;

25 5-[5-(3,5-dichloro-4-methoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-2-methanesulfonyl pyridine;

5-(5-cyclohexyl-3-trifluoromethyl-[1,2,4]triazol-1-yl)-2-methanesulfonyl pyridine;

5-(5-cyclohexen-1-yl-3-trifluoromethyl-[1,2,4]triazol-1-yl)-2-methanesulfonyl pyridine;

30 5-(5-phenyl-3-trifluoromethyl-[1,2,4]triazol-1-yl)pyridine-2-sulfonic acid amide;

5-[5-(4-bromophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridine-2-sulfonic acid amide;

35 5-[5-(4-fluorophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridine-2-sulfonic acid amide;

5-[5-(3,4-difluorophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridine-2-sulfonic acid amide;

5-[5-(4-chlorophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridine-2-sulfonic acid amide;

5-[5-(3,4-dichlorophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridine-2-sulfonic acid amide;

5 5-[5-(4-methoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridine-2-sulfonic acid amide;

5-[5-(3,4-dimethoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridine-2-sulfonic acid amide;

5-(5-p-tolyl-3-trifluoromethyl-[1,2,4]triazol-1-yl)pyridine-2-sulfonic acid amide;

10 5-[5-(3,4-dimethylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridine-2-sulfonic acid amide;

5-[5-(3-chloro-4-methylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridine-2-sulfonic acid amide;

15 5-[5-(4-chloro-3-methylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridine-2-sulfonic acid amide;

5-[5-(3-chloro-4-methoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridine-2-sulfonic acid amide;

5-[5-(4-chloro-3-methoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridine-2-sulfonic acid amide;

20 5-[5-(3-fluoro-4-methylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridine-2-sulfonic acid amide;

5-[5-(4-fluoro-3-methylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridine-2-sulfonic acid amide;

25 5-[5-(3-fluoro-4-methoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridine-2-sulfonic acid amide;

5-[5-(3,5-dichloro-4-methoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridine-2-sulfonic acid amide;

5-(5-pyridin-3-yl-3-trifluoromethyl-[1,2,4]triazol-1-yl)pyridine-2-sulfonic acid amide;

30 5-(5-pyridin-4-yl-3-trifluoromethyl-[1,2,4]triazol-1-yl)pyridine-2-sulfonic acid amide;

5-(5-cyclohexyl-3-trifluoromethyl-[1,2,4]triazol-1-yl)pyridine-2-sulfonic acid amide;

35 5-(5-cyclohexen-1-yl-3-trifluoromethyl-[1,2,4]triazol-1-yl)pyridine-2-sulfonic acid amide;

3-methanesulfonyl-6-(5-phenyl-3-trifluoromethyl-[1,2,4]triazol-1-yl)pyridazine;

3-[5-(4-bromophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-6-methanesulfonyl pyridazine;

3-[5-(4-fluorophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-6-methanesulfonyl pyridazine;

5 3-[5-(3,4-difluorophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-6-methanesulfonyl pyridazine;

3-[5-(4-chlorophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-6-methanesulfonyl pyridazine;

10 3-[5-(3,4-dichlorophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-6-methanesulfonyl pyridazine;

3-methanesulfonyl-6-[5-(4-methoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridazine;

3-[5-(3,4-dimethoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-6-methanesulfonyl pyridazine;

15 3-methanesulfonyl-6-(5-p-tolyl-3-trifluoromethyl-[1,2,4]triazol-1-yl)pyridazine;

3-[5-(3,4-dimethylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-6-methanesulfonyl pyridazine;

3-[5-(3-chloro-4-methylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-6-methanesulfonyl pyridazine;

20 6-methanesulfonyl pyridazine;

3-[5-(4-chloro-3-methylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-6-methanesulfonyl pyridazine;

3-[5-(3-chloro-4-methoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-6-methanesulfonyl pyridazine;

25 3-[5-(4-chloro-3-methoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-6-methanesulfonyl pyridazine;

3-[5-(3-fluoro-4-methylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-6-methanesulfonyl pyridazine;

3-[5-(4-fluoro-3-methylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-6-methanesulfonyl pyridazine;

30 6-methanesulfonyl pyridazine;

3-[5-(3-fluoro-4-methoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-6-methanesulfonyl pyridazine;

3-[5-(3,5-dichloro-4-methoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-6-methanesulfonyl pyridazine;

35 3-methanesulfonyl-6-(5-pyridin-3-yl-3-trifluoromethyl-[1,2,4]triazol-1-yl)pyridazine;

3-methanesulfonyl-6-(5-pyridin-4-yl-3-trifluoromethyl-[1,2,4]triazol-1-yl)pyridazine;

3-(5-cyclohexyl-3-trifluoromethyl-[1,2,4]triazol-1-yl)-6-methanesulfononyl pyridazine;

3-(5-cyclohexen-1-yl-3-trifluoromethyl-[1,2,4]triazol-1-yl)-6-methanesulfonyl pyridazine;

5 6-(5-phenyl-3-trifluoromethyl-[1,2,4]triazol-1-yl)pyridazine-3-sulfonic acid amide;

6-[5-(4-bromophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridazine-3-sulfonic acid amide;

6-[5-(4-fluorophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridazine-3-sulfonic acid amide;

10 6-[5-(3,4-difluorophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridazine-3-sulfonic acid amide;

6-[5-(4-chlorophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridazine-3-sulfonic acid amide;

15 6-[5-(3,4-dichlorophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridazine-3-sulfonic acid amide;

6-[5-(4-methoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridazine-3-sulfonic acid amide;

6-[5-(3,4-dimethoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridazine-3-sulfonic acid amide;

20 6-(5-p-tolyl-3-trifluoromethyl-[1,2,4]triazol-1-yl)pyridazine-3-sulfonic acid amide;

6-[5-(3,4-dimethylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridazine-3-sulfonic acid amide;

25 6-[5-(3-chloro-4-methylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridazine-3-sulfonic acid amide;

6-[5-(4-chloro-3-methylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridazine-3-sulfonic acid amide;

6-[5-(3-chloro-4-methoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridazine-3-sulfonic acid amide;

30 6-[5-(4-chloro-3-methoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridazine-3-sulfonic acid amide;

6-[5-(3-fluoro-4-methylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridazine-3-sulfonic acid amide;

35 6-[5-(4-fluoro-3-methylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridazine-3-sulfonic acid amide;

6-[5-(3-fluoro-4-methoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridazine-3-sulfonic acid amide;

6-[5-(3,5-dichloro-4-methoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyridazine-3-sulfonic acid amide;

6-(5-pyridin-3-yl-3-trifluoromethyl-[1,2,4]triazol-1-yl)pyridazine-3-sulfonic acid amide;

5 6-(5-pyridin-4-yl-3-trifluoromethyl-[1,2,4]triazol-1-yl)pyridazine-3-sulfonic acid amide;

6-(5-cyclohexyl-3-trifluoromethyl-[1,2,4]triazol-1-yl)pyridazine-3-sulfonic acid amide;

6-(5-cyclohexen-1-yl-3-trifluoromethyl-[1,2,4]triazol-1-yl)pyridazine-3-sulfonic acid amide;

10 5-methanesulfonyl-2-(5-phenyl-3-trifluoromethyl-[1,2,4]triazol-1-yl)pyrimidine;

2-[5-(4-bromophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-5-methanesulfonyl pyrimidine;

15 2-[5-(4-fluorophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-5-methanesulfonyl pyrimidine;

2-[5-(3,4-difluorophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-5-methanesulfonyl pyrimidine;

2-[5-(4-chlorophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-5-methanesulfonyl pyrimidine;

20 2-[5-(3,4-dichlorophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-5-methanesulfonyl pyrimidine;

5-methanesulfonyl-2-[5-(4-methoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyrimidine;

25 2-[5-(3,4-dimethoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-5-methanesulfonyl pyrimidine;

5-methanesulfonyl-2-(5-p-tolyl-3-trifluoromethyl-[1,2,4]triazol-1-yl)pyrimidine;

2-[5-(3,4-dimethylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-5-methanesulfonyl pyrimidine;

30 2-[5-(3-chloro-4-methylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-5-methanesulfonyl pyrimidine;

2-[5-(4-chloro-3-methylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-5-methanesulfonyl pyrimidine;

35 2-[5-(3-chloro-4-methoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-5-methanesulfonyl pyrimidine;

2-[5-(4-chloro-3-methoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-5-methanesulfonyl pyrimidine;

2-[5-(3-fluoro-4-methylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]-5-methanesulfonyl pyrimidine;

2-(5-phenyl-3-trifluoromethyl-[1,2,4]triazol-1-yl)pyrimidine-5-sulfonic acid amide;

5 2-[5-(4-bromophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyrimidine-5-sulfonic acid amide;

2-[5-(4-fluorophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyrimidine-5-sulfonic acid amide;

10 2-[5-(3,4-difluorophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyrimidine-5-sulfonic acid amide;

2-[5-(4-chlorophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyrimidine-5-sulfonic acid amide;

2-[5-(3,4-dichlorophenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyrimidine-5-sulfonic acid amide;

15 2-[5-(4-methoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyrimidine-5-sulfonic acid amide;

2-[5-(3,4-dimethoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyrimidine-5-sulfonic acid amide;

20 2-(5-p-tolyl-3-trifluoromethyl-[1,2,4]triazol-1-yl)pyrimidine-5-sulfonic acid amide;

2-[5-(3,4-dimethylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyrimidine-5-sulfonic acid amide;

2-[5-(3-chloro-4-methylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyrimidine-5-sulfonic acid amide;

25 2-[5-(4-chloro-3-methylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyrimidine-5-sulfonic acid amide;

2-[5-(3-chloro-4-methoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyrimidine-5-sulfonic acid amide;

30 2-[5-(4-chloro-3-methoxyphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyrimidine-5-sulfonic acid amide;

2-[5-(3-fluoro-4-methylphenyl)-3-trifluoromethyl-[1,2,4]triazol-1-yl]pyrimidine-5-sulfonic acid amide;

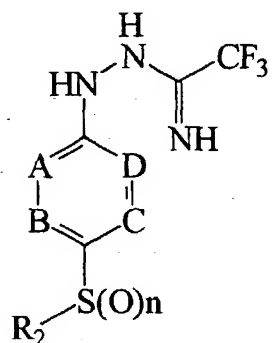
5-styryl-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole; and

35 5-[2-(4-methoxyphenyl)-vinyl]-1-(4-methanesulfonylphenyl)-3-trifluoromethyl-1H-[1,2,4]triazole;

or a non-toxic salt thereof.

3. An amidrazone derivative represented by formula 4:

Formula 4



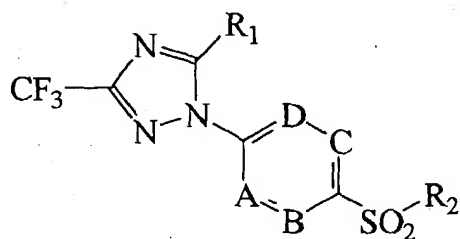
5

wherein, R_2 , A, B, C, and D are as defined in claim 1 and n is an integer of 0 to 2.

4. A method for preparing a 1,2,4-triazole derivative of formula 1 or a non-toxic salt thereof, comprising reacting an amidrazone derivative of formula 4a with acyl chloride of formula 5 in the presence of base:

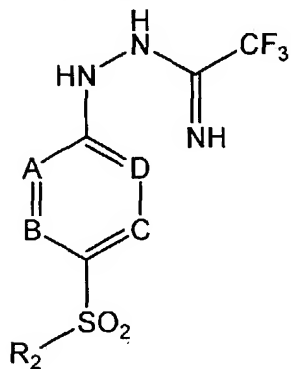
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Formula 1

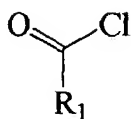


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Formula 4a



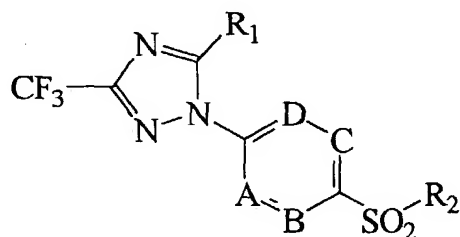
Formula 5



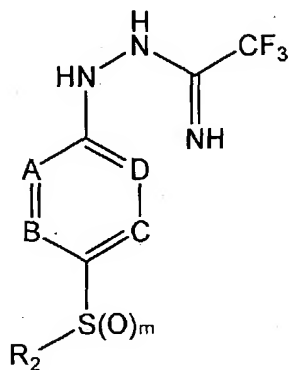
wherein, R_1 , R_2 , A, B, C, and D are as defined in claim 1.

- 5 A method for preparing a 1,2,4-triazole derivative of formula 1 or a non-toxic salt thereof, comprising reacting an amidrazone derivative of formula 4b with acyl chloride of formula 5 in the presence of base and oxidizing the resultant compound with an oxidizing agent selected from the group consisting of magnesium monoperoxyphthalate hexahydrate (MMPP), m-chloroperoxybenzoic acid (MCPBA), and
10 potassium peroxymonosulfate:

Formula 1

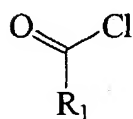


Formula 4b



15

Formula 5

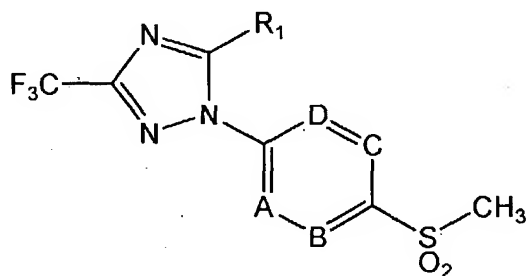


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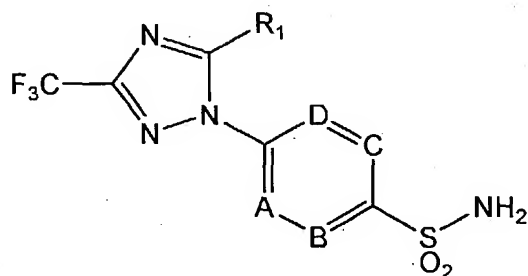
wherein, R_1 , R_2 , A, B, C, and D are as defined in claim 1 and m is 0 or 1.

6. A method for preparing a compound of formula 1b, comprising reacting a compound of formula 1a with hydroxylamine or a salt thereof in the presence of a strong base and a Lewis acid:

Formula 1a



Formula 1b

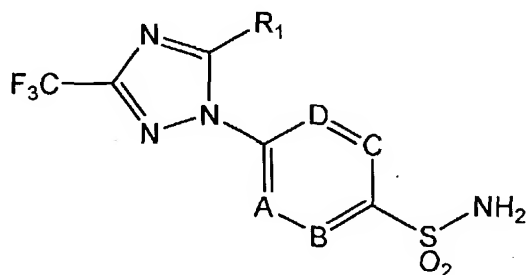


10

wherein, R_1 , A, B, C, and D are as defined in claim 1.

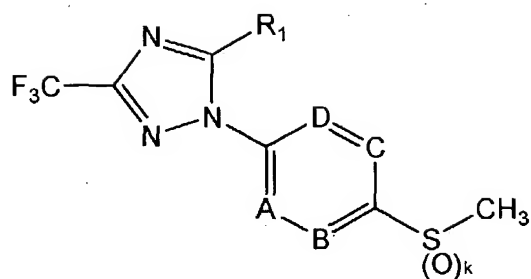
7. A method for preparing a 1,2,4-triazole derivative of formula 1b or a non-toxic salt thereof, comprising reacting a compound of formula 6a with hydroxylamine or a salt thereof in the presence of a strong base and a Lewis acid and oxidizing the resultant compound with an oxidizing agent selected from the group consisting of MMPP, MCPBA, and potassium peroxymonosulfate:

Formula 1b



20

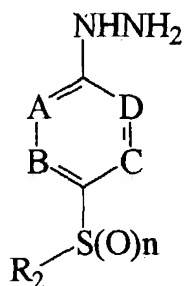
Formula 6a



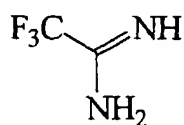
wherein, R_1 , A, B, C, and D are as defined in claim 1 and k is 0 or 1.

8. A method for preparing a compound of formula 4, comprising reacting a hydrazine derivative of formula 2 with trifluoroacetimidine of formula 3 in the presence of base:

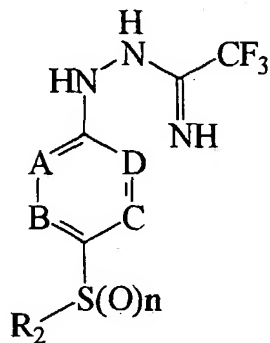
Formula 2



Formula 3



Formula 4



wherein, R_2 , A, B, C, and D are as defined in claim 1 and n is an integer of 0 to 2.

9. A pharmaceutical composition comprising a therapeutically effective amount of a 1,2,4-triazole derivative or a non-toxic salt thereof according to claim 1 as an active ingredient and a pharmaceutically acceptable carrier for the treatment of fever, pain, and inflammation.

5

10. A pharmaceutical composition comprising a therapeutically effective amount of a 1,2,4-triazole derivative or a non-toxic salt thereof according to claim 1 as an active ingredient and a pharmaceutically acceptable carrier for the treatment of cancers.

10

11. A pharmaceutical composition comprising a therapeutically effective amount of a 1,2,4-triazole derivative or a non-toxic salt thereof according to claim 1 as an active ingredient and a pharmaceutically acceptable carrier for the treatment of dementia.

15